

Amendments to the Specification:

Please replace the abstract on page 19 with the following amended abstract:

METHOD FOR COATING A METAL SURFACE WITH AN ULTRA-FINE LAYER

A The present invention relates to a method for continuously coating a substrate in motion such as a metal strip made of steel, the coating formed being an ultra-fine film of a thickness between 10 and 100 nm, deposited on the substrate: from a solution containing nanoparticles of oxides, in conditions of controlled pH, said substrate being at a temperature higher than 120°C, the total duration of the deposition being less than 5 seconds and preferably less than 1 second, characterised in that at least one chemical additive, called a "refiner", is incorporated into said solution, said refiner having, mutatis mutandis, the effect of restricting the formation of said coating.

(Figure 1)

Legend of the figures

Fig.2a: ~~——— Treating solution~~
~~Overhead liquid, precipitation zone~~
~~Growing sphere of vapour~~
Metal

Fig.2b: ~~——— Overheated solution, precipitation zone~~
~~——— Metal~~

Fig. 3: ~~——— Useful zone with refiners~~
~~——— Useful zone without refiners~~
~~——— Thickness (nm)~~
~~——— Temperature of the strip (°C)~~
~~——— Without refiners —◆—~~
~~——— With refiners —◆—~~